WHAT IS CLAIMED:

1. A catheter assembly for treating bifurcated vessels having a main vessel and a side branch vessel, comprising:

an elongated catheter;

a tracking guide wire lumen for receiving a tracking guide wire, the tracking guide wire lumen extending through at least a portion of the catheter;

an integrated guide wire lumen for receiving an integrated guide wire, the integrated guide wire lumen extending through at least a portion of the catheter;

a tracking guide wire positionable within the tracking guide wire lumen; an integrated guide wire positionable within the integrated guide wire lumen;

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a retaining element for retaining the tracking guide wire and the integrated guide wire.

- 2. The catheter assembly of claim 1, wherein the retaining element has a clip for retaining a guide wire.
- 3. The catheter assembly of claim 1, wherein the tracking guide wire lumen is of the over-the-wire type.
- 4. The catheter assembly of claim 1, wherein the tracking guide wire lumen is of the rapid exchange type.
- 5. The catheter assembly of claim 4, wherein the tracking guide wire lumen is unzippable.

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- 6. The catheter assembly of claim 1, wherein the integrated guide wire lumen is of the over-the-wire type.
- 7. The catheter assembly of claim 1, wherein the integrated guide wire lumen is of the rapid exchange type.
- 8. The catheter assembly of claim 7, wherein the integrated guide wire lumen is unzippable.
- 9. The catheter assembly of claim 1, wherein the integrated guide wire lumen extends from a proximal end through a distal end of the catheter.
- 10. A method of preparing a bifurcated vessel having a bifurcation, a main vessel, and a side branch vessel, for an interventional procedure, comprising the steps of:

providing an elongated catheter;

providing a tracking guide wire and tracking guide wire lumen for receiving the tracking guide wire, the tracking guide wire lumen extending through at least a portion of the catheter;

providing an integrated guide wire and integrated guide wire lumen for receiving the integrated guide wire, the integrated guide wire lumen extending through at least a portion of the catheter;

wherein the tracking guide wire lumen and the integrated guide wire lumen run substantially parallel to each other throughout their lengths, and the tracking

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guide wire lumen and the integrated guide wire lumen do not move apart with respect to each other;

back loading the tracking guide wire into the tracking guide wire lumen;

advancing the catheter over the tracking guide wire to a position proximal of the bifurcation in the main vessel;

advancing the integrated guide wire through the integrated guide wire lumen and into the side vessel branch;

removing the catheter from a patient's vasculature;

providing a retaining element for retaining the tracking guide wire and the integrated guide wire; and

maintaining the position of the tracking guide wire relative to the integrated guide wire with the retaining element.